

CIRCULAR DNA VECTORS FOR SYNTHESIS OF RNA AND DNA

Abstract of the Disclosure

The present invention provides methods for synthesis and therapeutic

- 5 use of DNA and RNA oligonucleotides and analogs. RNA oligonucleotides are synthesized using a small, circular DNA template which lacks an RNA polymerase promoter sequence. The RNA synthesis is performed by combining a circular single-stranded oligonucleotide template with an effective RNA polymerase and at least two types of ribonucleotide triphosphate to form an RNA oligonucleotide
- 10 multimer comprising multiple copies of the desired RNA oligonucleotide sequence. Preferably, the RNA oligonucleotide multimer is cleaved to produce RNA oligonucleotides having well-defined ends. Preferred RNA oligonucleotide multimers contain ribozymes capable of both *cis* (autolytic) and *trans* cleavage.

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